

***Rejection Under 35 U.S.C. § 112, Second Paragraph***

Claims 1-3, 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being allegedly indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully disagrees. However, for the purpose of expediting the issuance of claims, Applicant has amended Claim 1 to recite "obtaining a list of polymers to be synthesized," and "assigning each said polymers to a spatial location for synthesis by minimizing edge count." Additionally, Applicant has amended Claim 22 to recite "code for obtaining a list of polymers to be synthesized" and "code for assigning each said polymers to a spatial location for synthesis by minimizing edge count." Therefore the rejection is obviated.

Claims 1-3, 22-24 are rejected because the claims allegedly do not make clear what is considered edge count. Applicant respectfully disagrees because the term "edge count" can be found in the specification on page 4, lines 3-5 and page 12, lines 11-22.

Claims 1-3, 22-24 are rejected because the claims allegedly do not make clear what is considered to be reduction. Applicant respectfully disagrees because the term "reduction" is a term known to one of ordinary skill in the art and can found in the specification on page 3, lines 15-16.

Claims 1-3, 22-24 are rejected because the claims allegedly do not make clear what the term "traveling salesman optimization" or "locally greedy insertion heuristic." Applicant respectfully disagrees because these two terms are well known to one of ordinary skill in the art.

Claims 1-3, 22-24 are rejected because the claims do not make clear which type of synthesis is used. Applicant respectfully disagrees because the term "synthesis" is well known to one of ordinary skill in the art. Therefore, this rejection should be withdrawn.

***Prior Art Rejection Under 35 U.S.C. §102***

The Examiner has rejected claims 1 and 22 under 35 U.S.C. §102 as being allegedly anticipated by Hubbell *et. al.* (US 5,593,839).

Applicant has inserted the following sentence into the beginning of the specification, "This patent application claims priority from Hubbell *et. al.* (U.S. patent

number 5,593,839) and filed on June 2, 1995." Therefore, the Hubbell et. al. reference is no longer prior art under 35 U.S.C. § 102 and this rejection should be withdrawn.

***Obviousness Rejection Under 35 U.S.C. §103(a)***

The Examiner has rejected claims 1-3 & 22-24 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hubbell et. al. (US 5,593,839) in view of the specification at pages 13-15 of the application. However, Applicant has amended the specification to claim priority to the '839 patent. Therefore, this rejection should be withdrawn.

**CONCLUSION**

For these reasons, Applicant believes all pending claims are now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5699.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned attorney.

I hereby certify that this correspondence is being deposited by Express Mail to: Commissioner For Patents, Washington, D.C. 20231. On _____ Express Mail No.: _____ AFFYMETRIX, INC. By: _____
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Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES  
MADE TO THE APPLICATION**

*In the Specification*

Please insert the following paragraph to the beginning of the specification:

This patent application claims priority from Hubbell et. al. (U.S. patent number 5,593,839) and was filed on June 2, 1995.

*In the Claims*

Please amend Claims 1 & 22 as follows:

1. (amended) A computer implemented method for arranging polymers for combinatorial synthesis of said polymers on a substrate comprising:  
[reducing edge count between said polymers comprising  
computer-implemented steps for optimization of an ordered list of polymers]  
obtaining a list of polymers to be synthesized; and  
assigning each said polymers to a spatial location for synthesis by minimizing edge count.
22. (amended) A computer software product for arranging polymers for combinatorial synthesis of said polymers on a substrate comprising:  
[code for reducing edge count between said polymers comprising  
code for optimizing an ordered list of polymers; and  
a computer readable medium for storing said code.]  
code for obtaining a list of polymers to be synthesized; and  
code for assigning each said polymers to a spatial location for synthesis by minimizing edge count.